ALL-DEVICE-SPACE

AUTOMATIC BLACK REPLACEMENT

ABSTRACT OF THE DISCLOSURE

A direct device-space-to-device-space transform adjusts the amount of actual black ink, to avoid highlight and midtone granularity in incremental printing — but with no need for translation into perceptual space. If the amount of black ink specified in the input data for a particular color is very small or very large, then that specified color is passed through the transform without substantial change. Thereby the amount of actual black ink and other colorants is held as nearly as practical at levels dictated by device-space input specifications while minimizing visible granularity. Replacement behavior is chosen to smoothly blend between different kinds of operation in different tonal ranges. This system accommodates personnel trained in classical printing-press technologies, who are accustomed to full control over amounts of black and other colorants.